

### STATEMENT OF BASIS

as required by LAC 33:IX.2411, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0098094; A18399; PER20090001** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I. THE APPLICANT IS:** Louisiana Department of Public Safety & Corrections  
Elayn Hunt Correctional Center Wastewater Treatment Plant  
P.O. Box 174  
St. Gabriel, LA 70776
- II. PREPARED BY:** Darlene Bernard
- DATE PREPARED:** September 15, 2009
- III. PERMIT ACTION:** Renewal of LPDES Permit LA0098094, A18399  
LPDES application received: June 8, 2009  
LPDES permit effective: October 1, 2004  
LPDES permit expired: September 30, 2009
- IV. FACILITY INFORMATION:**
- A. The application is for the discharge of treated sanitary wastewater from an existing publicly owned treatment works serving the Elayn Hunt Correctional Center.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located at 6925 Highway 74, in St. Gabriel, Iberville Parish.
- D. The treatment facility consists of a 3-Cell Aerated Lagoon, followed by a Clarifier then to an automatically backwashed sandfilter. Disinfection is by chlorination.

Statement of Basis  
Louisiana Department of Public Safety & Corrections  
LA0098094  
Page 2

E. Outfall 001

Discharge Location: Latitude 30°15'47" North  
Longitude 91°06'35" West

Description: treated sanitary wastewater

Design Capacity: 0.805 MGD

**NOTE: The previous permit was issued for a design capacity of 0.6 MGD. The renewal application list design capacity as 0.805 MGD, therefore this permit is being issued for a design capacity of 0.805 MGD.**

Type of Flow Measurement which the facility is currently using:

Ultrasonic Flow measurement with a Chart Recorder

V. RECEIVING WATERS:

The discharge is into the Mississippi River subsegment 070301 of the Mississippi River Basin. Subsegment 070301 of the Mississippi River Basin is not listed on the 2006 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 070301 of the Mississippi River Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment 070301	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Full	Full	N/A	Full	N/A	N/A

<sup>1/</sup>The designated uses and degree of support for Segment 070301 of the Mississippi River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Volume 5, Part B, Water Quality Inventory respectively.

Statement of Basis  
Louisiana Department of Public Safety & Corrections  
LA0098094  
Page 3

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 070301 of the Mississippi River Basin, has been identified by the U.S. Fish and Wildlife Service (FWLS) as habitat for the Pallid sturgeon, which is listed federally as a threatened species. However, this type of discharge is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required..

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

The public notice is published in a local paper of general circulation and the Office of Environmental Services Public Notice Mailing List.

For additional information contact:

Darlene Bernard  
Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
PO Box 4313  
Baton Rouge, LA 70821-4313

Statement of Basis  
Louisiana Department of Public Safety & Corrections  
LA0098094  
Page 4

**IX. PROPOSED PERMIT LIMITS:**

The previous permit contained reporting requirements for Phosphorus and Nitrogen. These reporting requirements were for informational gathering purposes because the receiving waterbody was listed as impaired for Phosphorus and Nitrogen. However, since the issuance of the previous permit, the phosphorus and nitrogen impairments have been removed. Therefore, the reporting requirements for Phosphorus and Nitrogen have been removed from the permit.

**Final Effluent Limits:**

**OUTFALL 001**

Final effluent limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

<b>Effluent Characteristic</b>	<b>Monthly Avg. (lbs./day)</b>	<b>Monthly Avg.</b>	<b>Weekly Avg.</b>	<b>Basis</b>
BOD <sub>5</sub>	201	30 mg/l	45 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size which discharge into the Mississippi River.
TSS	201	30 mg/l	45 mg/l	Since there are no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

Statement of Basis  
Louisiana Department of Public Safety & Corrections  
LA0098094  
Page 5

**Other Effluent Limitations:**

**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.a, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**X. PREVIOUS PERMITS:**

<b>LPDES Permit No LA0098094:</b>	Issued:	September 28, 2004
	Effective:	October 1, 2004
	Expired:	September 30, 2009

**Outfall 001 (Discharge is into an unnamed ditch, thence into Bayou Braud, thence into Spanish Lake, of subsegment 040201)**

**During the period beginning the effective date of the permit and lasting through three (3) years from the effective date of the permit (Design 0.60 MGD)**

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD <sub>5</sub>	10 mg/l	15 mg/l	1/week	3-Hour Composite
TSS	15 mg/l	23 mg/l	1/week	3-Hour Composite
Ammonia-Nitrogen	5 mg/l	10 mg/l	1/week	3-Hour Composite
Fecal Coliform	200	400	1/week	Grab
pH	6-9 Standard Units		2/month	Grab

Statement of Basis  
Louisiana Department of Public Safety & Corrections  
LA0098094  
Page 6

**Outfall 001 (Discharge is into the Mississippi River of subsegment 070301)  
During the period beginning three (3) years from the effective date of the permit,  
and lasting through the expiration date of the permit  
(Design .60 MGD)**

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Monthly Avg.	Weekly Avg.	Measurement <u>Frequency</u>	Sample <u>Type</u>
Flow	Report	Report	Continuous	Recorder
BOD <sub>5</sub>	30 mg/l	45 mg/l	1/week	3-Hour Composite
TSS	30 mg/l	45 mg/l	1/week	3-Hour Composite
Phosphorus	---	Report	1/quarter	Grab
Kjeldahl Nitrogen (Total as N)	---	Report	1/quarter	Grab
Fecal Coliform	200	400	1/week	Grab
pH	6-9 Standard Units		1/week	Grab

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**

**A) Inspections**

A review of EDMS indicates the following inspections were performed for this facility:

**Date – September 8, 2008**

**Findings and/or violations:**

A Hurricane Assessment was done to assess damages from Hurricane Gustav. There was no power at the facility and therefore, the facility was not operating at the time of the inspection. Sewage/sewage debris was not observed on the facility grounds. The treatment plant and lift stations did not overflow. Facility has been diverting wastewater to an adjacent stormwater retention pond which is now full. Facility may have to do an emergency bypass to a nearby drainage ditch, (flows to Spanish Lake) if power is not restored soon. Reportedly, power should be back on tonight.

**B) Compliance and/or Administrative Orders**

A review of EDMS revealed that there were no recent enforcement actions administered against this facility.

Statement of Basis  
Louisiana Department of Public Safety & Corrections  
LA0098094  
Page 7

C) **DMR Review**

A review of the discharge monitoring reports for the period beginning January 1, 2007 through March 31, 2009 revealed the following violations:

Date	Parameter	DMR Value	Permit Limit
02-07	BOD <sub>5</sub>	39.40 mg/l Mon. Avg.	30 mg/l
	BOD <sub>5</sub>	60.80 Weekly Avg.	45 mg/l
	TSS	44.28 Mon. Avg.	30 mg/l
	TSS	68.8 Weekly Avg.	45 mg/l
03-07	BOD <sub>5</sub>	181.62 lbs/day (Mass)	150 lbs/day
	BOD <sub>5</sub>	52.34 mg/l Mon. Avg.	30 mg/l
	BOD <sub>5</sub>	131.00 mg/l Weekly Avg.	45 mg/l
	TSS	37.70 Mon. Avg.	30 mg/l
	TSS	56.70 Weekly Avg.	45 mg/l
04-07	TSS	33 mg/l Mon. Avg.	30 mg/l
	TSS	46.0 Weekly Avg.	45 mg/l
05-07	TSS	49.14 mg/l Mon. Avg.	30 mg/l
	TSS	59.70 mg/l Weekly Avg.	45 mg/l
06-07	TSS	43.30 mg/l Mon. Avg.	30 mg/l
	TSS	60.30 mg/l Weekly Avg.	45 mg/l
09-07	TSS	34.59 Mon. Avg.	30 mg/l
	Fecal Coliform	2,000 col/100ml Max.	400 col/100ml
10-07	TSS	33.9 mg/l Mon. Avg.	30 mg/l
11-07	TSS	51.80 Mon. Avg.	30 mg/l
	TSS	57.10 Weekly Avg.	45 mg/l
12-07	TSS	48.20 mg/l Mon. Avg.	30 mg/l
	TSS	63.30 Weekly Avg.	45 mg/l
01-08	TSS	38.24 mg/l Mon. Avg.	30 mg/l
	Fecal Coliform	2,000 col/100ml Max.	400 col/100 ml
02-08	BOD <sub>5</sub>	41.0 mg/l Mon. Avg.	30 mg/l
	BOD <sub>5</sub>	73.30 mg/l/Weekly Avg.	45 mg/l
03-08	TSS	53.70 mg/l Mon. Avg.	30 mg/l
	TSS	62.80 Weekly Avg.	45 mg/l
04-08	TSS	54.65 mg/l Mon. Avg.	30 mg/l
	TSS	70.0 mg/l Weekly Avg.	45 mg/l
05-08	TSS	59.56 mg/l Mon Avg.	30 mg/l
	TSS	77.90 mg/l Weekly Avg.	45 mg/l
06-08	TSS	40.84 mg/l Mon. Avg.	30 mg/l
	TSS	58.25 mg/l Weekly Avg.	45 mg/l
	Fecal Coliform	2,000 col/100 ml Max.	400 col/100 ml
07-08	TSS	40.49 mg/l Mon. Avg.	30 mg/l
	TSS	48.60 Weekly Avg.	45 mg/l
08-08	TSS	37.95 mg/l Mon. Avg.	30 mg/l
	TSS	55.7 Weekly Avg.	45 mg/l

Statement of Basis  
Louisiana Department of Public Safety & Corrections  
LA0098094  
Page 8

Date	Parameter	DMR Value	Permit Limit
01-09	TSS	32.2 mg/l Mon. Avg.	30 mg/l
02-09	TSS	41.8 mg/l Mon. Avg.	30 mg/l
	TSS	74.3 mg/l Weekly Avg.	45 mg/l
03-09	TSS	67.8 mg/l Mon. Avg.	30 mg/l
	TSS	131.5 mg/l Weekly Avg.	45 mg/l

NOTE: There were no DMRs on file in EDMS for October, 2008 to December, 2008.

**XII. ADDITIONAL INFORMATION:**

**Final effluent loadings** (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.805 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ gal/lb} \times 0.805 \text{ MGD} \times 30 \text{ mg/l} = 201 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.5 and 1.0 MGD.

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
BOD <sub>5</sub>	1/week	3-Hr Composite
Total Suspended Solids	1/week	3-Hr Composite
Fecal Coliform Bacteria	1/week	Grab
pH	1/week	Grab

**Pollution Prevention Requirements**

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. Please make additional copies to be utilized for each year of this permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

Statement of Basis  
Louisiana Department of Public Safety & Corrections  
LA0098094  
Page 9

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

**XIII. TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV. REFERENCES:**

Louisiana Water Quality Management Plan, Vol. 10, "Wasteload Allocations and Discharger Inventory", Louisiana Department of Environmental Quality, 1992.

Louisiana Water Quality Management Plan, Vol. 5-B, "Water Quality Inventory", Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 1999.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 23 - "The LPDES Program", Louisiana Department of Environmental Quality, 1999.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Louisiana Department of Public Safety & Corrections, Elayn Hunt Correctional Center June 8, 2009